

JUN/FY06

**FORT WILLIAM HENRY
HARRISON
ARMY NATIONAL GUARD
Montana**

**Army Defense Environmental
Restoration Program
Installation Action Plan**

Final 1 September 2006

Table of Contents

| | |
|--|----|
| Table of Contents | 1 |
| Statement of Purpose | 2 |
| Acronyms | 3 |
| Installation Information | 5 |
| Cleanup Program Summary | 6 |
| Military Munitions Response Program | 7 |
| Summary | 8 |
| Contamination Assessment | 9 |
| MMRP Active Sites | 10 |
| <i>FWHH-001-R-01, .30 Caliber Range</i> | 11 |
| <i>FWHH-002-R-01, .30 Caliber Range TD</i> | 12 |
| <i>FWHH-003-R-01, Ordnance Burial Trench</i> | 13 |
| MMRP Schedule | 14 |
| MMRP Costs | 15 |
| Community Involvement | 16 |

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Military Munitions Response Program (MMRP) for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations and necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, US Army Environmental Center (USAEC), Fort William Henry Harrison, National Guard Bureau (NGB), executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

The following agencies contributed to the formulation and completion of this Installation Action Plan:

Engineering and Environment, Inc. (EEI) for USAEC
Montana Army National Guard (MTARNG)

Acronyms & Abbreviations

| | |
|---------------|--|
| AEDB-R | Army Environmental Database, Restoration |
| AEC | (United States) Army Environmental Center |
| ARNG | Army National Guard |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act (1980) |
| COC | Contaminants of Concern |
| CSMS | Combined Surface Maintenance Shop |
| CTC | Cost-to-Complete |
| CTT | Closed, Transferred, and Transferring |
| cy | cubic yards |
| DA | Department of Army |
| DD | Decision Document |
| DMM | Discarded Military Munitions |
| EPA | (United States) Environmental Protection Agency |
| FS | Feasibility Study |
| FY | Fiscal Year |
| GIS | Geographic Information System |
| GW | Groundwater |
| HMX | High Melting Point Explosives |
| IAP | Installation Action Plan |
| IRA | Interim Remedial Action |
| IRP | Installation Restoration Program |
| K | \$1,000 |
| LTM | Long-term Management |
| MC | Munitions Constituents |
| MMRP | Military Munitions Response Program |
| MT | Montana |
| MTARNG | Montana Army National Guard |
| MTDEQ | Montana Department of Environmental Quality |
| NE | Not Evaluated |
| NFA | No Further Action |
| NGB | National Guard Bureau |
| NPL | National Priorities List |
| PA | Preliminary Assessment |
| POM | Program Objective Memorandum (budget) |
| PP | Proposed Plan |
| PY | prior year |
| RA | Remedial Action |
| RAB | Restoration Advisory Board |
| RA(C) | Remedial Action - Construction |
| RC | Response Complete |
| RCRA | Resource Conservation and Recovery Act |
| RD | Remedial Design |
| RDX | Royal Demolition Explosives |
| REM | Removal Action |
| RI | Remedial Investigation |

Acronyms & Abbreviations

| | |
|--------------|---|
| RIP | Remedy in Place |
| ROD | Record of Decision |
| SI | Site Inspection |
| TAPP | Technical Assistance for Public Participation |
| TRC | Technical Review Committee |
| USACE | United States Army Corps of Engineers |
| USAEC | United States Army Environmental Center |
| UXO | Unexploded Ordnance |
| VA | Veterans Administration |
| yr | year |

Installation Information

Installation Locale: Fort Harrison is located approximately 3 miles west of Helena, Montana in an intermountain valley. This valley is 25 miles from north to south and 35 miles from east to west and averages about 4,000 feet elevation. The surrounding mountains range from 7,000 to 9,000 feet elevation. Fort Harrison occupies 2,154 acres, an additional 1,727 acres are leased, and an additional 3,580 acres are used with a land use permit.

Installation Mission: The Montana ARNG (MTARNG) mission is to provide units and personnel to the state and nation in three roles, federal, state and community. The overall mission of the MTARNG is to train and equip soldiers to meet readiness standards and conduct wartime and peacetime missions; provide a "citizen-soldier" military model for the Partnership for Peace Program; provide ready forces for state missions; and participate in community activities that add value to Montana. The MTARNG mission includes responding to wildfires and helping communities during floods, tornadoes, hurricanes, snowstorms or other emergency situations. In times of civil unrest, the MTARNG is also ready to respond, if needed.

Lead Organization:

Headquarters, National Guard Bureau

Lead Executing Agency:

Montana Department of Military Affairs, Environmental Office

Regulatory Participation

State: Montana Department of Environmental Quality (MTDEQ)

National Priorities List (NPL) Status: Not on NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status: No RAB has been established

Installation Program Summaries

MMRP

Primary Contaminants of Concern: Royal Demolition Explosives (RDX), High Melting Point Explosive (HMX), Nitrates, Metals, Solvents

Affected Media of Concern: Soil, Water

Estimated Date for RC: 2017

Funding to Date (up to FY05): \$0

Current Year Funding (FY06): \$0

Cost-to-Complete (FY07+): \$4,807K

Cleanup Program Summary

Installation Historic Activity

Fort Harrison was established under authority of the US War Department in May of 1892. Originally named to compliment President Benjamin Harrison (the 23rd President), the name was changed in 1906 to Fort William Henry Harrison to honor the 9th President of the US.

From the 1890's to the 1920's Fort Harrison was the base for the 24th Infantry, a group made up almost entirely of African Americans. This historic band of "buffalo soldiers" contributed to the fascinating ethnic history of Helena and the northern Rockies.

In 1910, the Montana National Guard had realized the usefulness of Fort Harrison as a training center, and continued that use after the departure of the US Army in 1913. At that time the War Department determined that a permanent federal military unit was no longer necessary in the region and withdrew regular army troops.

The US Public Health Service acquired the original Fort in 1919 and operated a hospital there until 1922, when the Veterans Administration (VA) took over the facility. With increased numbers of recruits in 1924, the National Guard resumed training operations on land adjacent to the Old Fort Harrison. This training area, also called Fort Harrison, encompassed the Historic Post Cemetery. The Montana National Guard has utilized the area continuously since 1925.

MMRP

- Prior Year Progress: A Preliminary Assessment (PA) was completed at all sites. A PA/SI was completed in 1996; however, none of the three sites listed in this document were known to exist at the time of the PA/SI and therefore were not included in the document.
- Future Plan of Action: No further action is anticipated on the former 30 Cal range. With respect to the burial trench, the MTARNG plans to continue annual monitoring of a down-gradient monitoring well with no additional action unless a release of contaminants is documented.

FORT WILLIAM HENRY HARRISON

Military Munitions Response Program

Total AEDB-R MMRP Sites / AEDB-R Sites with Response Complete: 3/0

AEDB-R Site Types

1 UXO 2 Small Arms Ranges

Most Widespread Contaminants of Concern: Metals

Media of Concern: Soil, Water

Completed REM/IRA/RA:

None

Total MMRP Funding

| | |
|------------------------------|-----------------|
| Prior Years (up to FY05): | \$ 0 |
| Current Year (FY06): | \$ 0 |
| Future Requirements (FY07+): | <u>\$4,807K</u> |
| Total: | \$4,807K |

Duration of MMRP

Year of MMRP Inception: 2003

Year of MMRP Response Complete (RC): 2017

Year of IRP Completion including Long-Term Management (LTM): 2047

MMRP Contamination Assessment

MMRP Contamination Assessment Overview

The Phase 3 Army Range Inventory was completed and two sites are eligible for MMRP (two .30 Caliber Ranges). The Phase 3 Inventory serves as the Preliminary Assessment (PA) under CERCLA.

Description of Major MMRP Concerns

Two unconfirmed sites on private property with no documented threat to surface waters of the state of Montana:

1. Off-post contamination and responses (if any) - None documented
2. Regulatory Interest - None indicated
3. Complicating Factors and uncertainties - None
4. Public Interest - None indicated

Responses to Date Addressing Major MMRP Concerns

Investigations have been ongoing at FWHH-003-R-01. The Burial trench was partially excavated in 1998 and results were transmitted to MTDEQ. No action beyond annual monitoring of a down gradient well was indicated by MTDEQ.

MMRP Cleanup Exit Strategy

The installation plans to complete all Site Investigations by FY08 and execute follow on phases/actions as required in the individual site cleanup strategies.

FORT WILLIAM HENRY HARRISON

Military Munitions
Response Program
Site Descriptions

FWHH-001-R-01

.30 Caliber Range

SITE DESCRIPTION

According to a Plot Plan map, dated 30 June 1926, a .30 caliber range existed within the current Veterans Administration property. The exact range size is unknown. However, the estimated range size is 1.71 acres when a standard range fan is applied. The map does not depict a firing point, or a range fan, so the firing point is unknown. The words “.30 cal live” are written within this approximate area on the Plot Plan map.

This area is currently undeveloped property used by the Veterans Administration Hospital. There have been no known discoveries of Unexploded Ordnance (UXO)-Discarded Military Munitions (DMM) found or any cleanup activities completed within this area.

There are currently no down gradient wells as the area down gradient to this site is private property.

CLEANUP STRATEGY

A Site Inspection (SI) has not been identified for this site. No further action is recommended as the strategy as there is no evidence that this site actually was used and no evidence exists for contamination of soil and water as a result of this range. Recommend this site be deleted from the database.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: 5-Negligible

CONTAMINANTS OF CONCERN:
Metals

MEDIA OF CONCERN: Soil, Water

| Phases | Start | End |
|--------------|--------------|--------|
| PA | 200306 | 200312 |
| SI | 200610 | 200803 |
| RI/FS | 201010 | 201109 |
| RD | 201510 | 201609 |
| RA (C) | 201610 | 201709 |

RC DATE: 201709

FWHH-002-R-01 .30 Caliber Range-TD

SITE DESCRIPTION

According to a Plot Plan map, dated 30 June 1926, a .30 caliber range existed within the current Veterans Administration property. The exact range size is unknown. However, the estimated range size is 769.34 acres when a standard range fan is applied. The map does not depict a firing point, or a range fan, so the firing point is unknown. The words “.30 cal live” are written within this approximate area on the Plot Plan map. This area is currently undeveloped property used by the Veterans Administration Hospital. There have been no known discoveries of UXO-DMM found, or any cleanup activities completed within this area. A standard range fan was applied to the site and extends eastward off the installation property for form this transferred portion of the range. There are currently approximately six down gradient wells being monitored annually.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: 5-Negligible

CONTAMINANTS OF CONCERN:
RDX, HMX, Nitrates, Metals,
Solvents

MEDIA OF CONCERN: Soil, Water

| Phases | Start | End |
|-------------|--------------|--------|
| PA | 200306 | 200312 |
| SI | 200610 | 200803 |
| RI/FS | 201010 | 201109 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |

RC Date: 201709

CLEANUP STRATEGY

An SI has not been identified for this site. No further action on this site is recommended as there is no evidence that this site was actually used and there is no evidence that any threat exists to soil and water.

FWHH-003-R-01

Ordnance Burial Trench

SITE DESCRIPTION

According to different site assessment reports, personal interviews and pictures identify an ordnance burial pit that exists approximately 200 feet north of the Combined Surface Maintenance Shop (CSMS) building and is approximately .16 acres in size. According to personal interviews, in 1983, two 2.5-ton truckloads of inert/expended ordnance, specifically, 76mm, 90mm, 105mm, 155mm, and 4.2 inch ammunition was dumped in this area and covered.

Under AEDB-R site identification number FWHH-005, intrusive sampling activity for the purpose of definitively locating the ordnance burial trench occurred in 1998. The intrusive sampling occurred because additional geophysical information was obtained following digital geophysical survey work. The digital geophysical survey occurred in 1998.

Intrusive sampling was done in several suspect areas based on magnetic anomaly contour maps. One of the suspect areas intrusively sampled was found to contain spent inert munitions and other solid waste. Medical waste was intermingled with artillery and mortar rounds and thus no further action was taken to remove items until the MTDEQ was notified of the discovery. UXO was not observed in the test pit but anecdotal stories suggest that UXO could be present among the inert/expended ordnance. MTDEQ was formally advised of the discovery; no further action on the site has occurred. A down gradient monitoring well is monitored each year. The site was determined Response Complete in September 1998. No contaminants have been detected in water samples thus far. This area is currently undeveloped. There are approximately six wells being monitored annually, one of these monitoring wells is immediately down gradient of the burial trench.

CLEANUP STRATEGY

This site will not be disturbed unless the results from ground water monitoring well data indicate a release is occurring. Absent evidence of a release from this site, it is recommended that no additional action be scheduled.

STATUS

REGULATORY DRIVER: CERCLA

RAC SCORE: 3-Moderate

CONTAMINANTS OF CONCERN:
RDX, HMX, Nitrates, Metals,
Solvents

MEDIA OF CONCERN: Soil, Water

| Phases | Start | End |
|-------------|--------------|--------|
| PA | 200306 | 200312 |
| SI | 200610 | 200803 |
| RI/FS | 201010 | 201109 |
| RD | 201510 | 201609 |
| RA(C) | 201610 | 201709 |
| LTM | 201710 | 204709 |

RC DATE: 201709

Initiation of MMRP: 2003

Past Phase Completion Milestones

2003

- PA at all three sites

Projected ROD/DD Approval Dates: Unknown

Projected Construction Completion: 2017

Schedule for Five Year Reviews: None

Estimated Completion Date of MMRP including LTM: 2047

FORT WILLIAM HENRY HARRISON MMRP SCHEDULE

(Based on current funding constraints)

| AEDB-R# | PHASE | FY07 | FY08 | FY09 | FY10 | FY11 | FY12 | FY13 | FY14 | FY15+ |
|---------------|-------|------|------|------|------|------|------|------|------|--------|
| FWHH-001-R-01 | SI | | | | | | | | | |
| | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FWHH-001-R-02 | SI | | | | | | | | | |
| | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| FWHH-001-R-03 | SI | | | | | | | | | |
| | RI/FS | | | | | | | | | |
| | RD | | | | | | | | | 201609 |
| | RA(C) | | | | | | | | | 201709 |
| | LTM | | | | | | | | | 204709 |

Prior Years Funds

Total Funding up to FY04: \$0K

FY05

| Site Information | Expenditures | FY Total |
|------------------|--------------|----------|
| | \$0 | \$0 |

Total Prior Year Funding: \$0

Current Year (FY06) Requirements

| Site Information | Requirements | FY Total |
|------------------|--------------|----------|
| | \$0 | \$0 |

Total Funding FY06: \$0

Total Future Requirements: \$4,807K

Total MMR Program Cost (from inception to completion of the MMRP): \$4,807K

Lack of outstanding cleanup issues or activities does not warrant establishment of a RAB.